

Oil Field Environmental Incident Summary

Incident: 20201231154312 **Notice:** 12/31/2020 15:43 **Occurred:** 12/31/2020 08:30

Responsible Party: Phoenix Petroleum LLC

Well Operator: Phoenix Petroleum LLC

Well Name: OVERLEE 2

Field Name: NORTH TIOGA

Well File #: 13077

Facility ID #:

County: DIVIDE

Twp Rng Sec Qtr: 160 95 25 SE NW

Location Description: hole in flowline, causing 2 bbls. of oil & 7 bbls of water to surface, then flowed down hill following a trail to a open flat area.

Submitted By: JoAnn Klevenberg

Received By:

Contact Info: JoAnn Klevenberg
501 S Cherry St. #1100
Denver CO 80246

Affected Medium: Topsoil

General Land Use: Other - Described Above

Near. Occupied Bldg: 1 Mile

Nearest Water Well: 1 Mile

Type of Incident: Pipeline Leak

Release Contained: No

Reported to NRC: Unknown

	Spilled	Units	Recovered	Units	Followup	Units
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Oil	2	Barrels				
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Brine	7	Barrels				
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Other

Oth Rel. Contaminant:

Date Inspected:

Clean Up Concluded:

Written Report Recd:

Risk Evaluation:

NONE

Areal Extent:

600'L X 2'W

Potential Env. Impacts:

NONE

Action Taken/Planned:

shut well in/scraping up area where spill is when weather condition is permitting

Wastes Disposal Location:

Will haul to R360 disposal

Other Agencies Involved:

Updates

Date: 12/31/2020 **Status:** Reviewed - Follow-up Required

No Further Action: ☐

Author: Suess, Bill

Notes:

According to the incident report, this spill was not confined to the well pad. Follow-up is needed.

Updated Volumes and Contaminant None at the time of this update

Date: 1/4/2021 **Status:** Correspondence - More Follow-up Required

No Further Action: ☐

Author: Stockdill, Scott

Notes:

Email from NDIC informing the NDDEQ that the Overlee 2 incident is larger than what was reported.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 1/6/2021 **Status:** Inspection - More Follow-up Required

No Further Action: ☐

Author: Suess, Bill

Notes:

Inspected the site on 1/5/2021. The release flowed from a pipeline break on the west side of the site and followed a drainage path approximately 150 yards to the west and SW. At the time of the inspection the pipeline had been exposed but no remediation had been completed. The RP has been contacted and a work plan requested. More follow-up is needed.

Updated Volumes and Contaminant None at the time of this update

Date: 1/11/2021 **Status:** Inspection - More Follow-up Required

No Further Action: ☐

Author: Stockdill, Scott

Notes:

Arrived on location 1/11/2021.

Visible flow path following drainage to SW toward wetland. Small excavations along flow path to prevent further flow of contaminants. No staff on location. A delineation is necessary to complete the remediation.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 1/22/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email sent to responsible party.

"... I was curious what the progress is on the cleanup at the Overlie 2 wellsite? ..."

Full email in the incident summary.

Updated Volumes and Contaminant None at the time of this update

Date: 1/27/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email from responsible party.

"... Please find the following to delineate and remediation plan for the Overlee #2 flowline leak:

- 1) Repair flowline – repaired flowline 01-13-2021 – well returned to production 01-16-2021.
- 2) Remove soil as necessary – 5 ft wide x 2 ft deep x 1080 feet long, as shown on attached hand drawn map– haul to closest R360 disposal.
- 3) Extract soil samples to be sent for analysis from various spots on location
- 4) Provide soil sample analysis to NDIC and ND Environmental Quality for review.
- 5) Upon approval from NDIC and ND Environmental Quality haul in clay and topsoil – re-seed as weather permits.

Attached are Facility Diagrams and Site Locations Maps for the wellsite for your review.

Please contact us if you have any questions or require additional information. ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 1/27/2021 **Status:** Inspection - Vegetation Check **No Further Action:** ☐

Author: DeVries, Taylor

Notes:

Inspection Date: 1/27/2020

Arrived on well pad at 1220. There is a layer of snow around entire location. The ground looks to have been backfilled. A summer site inspection is needed.

Photos were taken and can be found in the report folder.

Updated Volumes and Contaminant None at the time of this update

Date: 2/9/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email sent to responsible party.

"... What is the status on the current remediation of the Overlee 2? ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 2/9/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email sent to responsible party.

"... I would also like it if you took a sample every 50' along the flow path. I can take spit samples with you if you would like. ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 3/24/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email sent to responsible party.

"... What is the current status on the Overlee 2 cleanup? ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 3/24/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email response from responsible party.

"... We have signed an agreement with Barr Engineering to do the soil samples and trying to coordinate them with the contractor, Simonson & Oien.
I will let you know when this can all come together and move forward with the cleanup
Any questions let me know. ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 5/13/2021 **Status:** Inspection - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Arrived on location 2:14 5/13/2021.

No sign of attempted work having been done at the location. Follow-up with company to ask what the progress is on the cleanup.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 5/19/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email sent to responsible party.

"... I need an update on the status of the Overlee 2 cleanup? ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 5/19/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email from responsible party.

"... Denise will be out of the office until Tuesday. ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 6/1/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email sent to responsible party.

"... I left you a voicemail. I need an update on the Overlee 2. If I don't have an update and see some work done soon I will start a NOV. Violations can be up to \$12,500/Day/Violation from the release date to when we believe you have the remediation under control.

If You have any questions feel free to ask. ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 6/2/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email from responsible party.

"... I am working on coordinating to get started on Monday 6-7-21. I will contact you tomorrow when I have more information. ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 6/3/2021 **Status:** Inspection - More Follow-up Required **No Further Action:** ☐

Author: Torgerson, Brad

Notes:

On 6/3/2021 at 12:10 pm Sunny and 91 Degrees F, I visited the Phoenix Petroleum LLC - Overlee 2 separation and storage location. Vegetation was absent north, west, and SW of the location. It appeared the spill may have flowed down a drainage way SW of the location approximately 300 yards. An assessment report, and further follow-up on this release appears to be necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 6/3/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email from responsible party.

"... We have Simonson & Oien lined up to start clean-up on the Overlee #2 on Monday June 7th. Barr Engineering will be on-site Tuesday June 8th to do soil samples. Removed soil will be hauled to R360 Prairie Disposal south of Tioga. Any questions please call me at your convenience. ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 6/8/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email sent to responsible party.

"... Please provide Daily updates with any field sample results and information. ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 6/8/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email from responsible party.

"... 6-7-21 Simonson & Oien started excavating soil
6-8-21 Barr Engineering on site doing soil sample testing ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 6/8/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email sent to responsible party.

"...Great Keep me posted with Daily updates with photos if you have them. Site will need to be cleaned up to the 250 mg/L Chloride and <12 SAR guidance.

Barr should be sampling for

- Chlorides
- Bromides
- Sulfates
- SAR
- EC

I will have someone drop out there this week sometime and I will be out next week Tuesday to ensure cleanup is going as needed. ..."

Full email in the incident folder.

Updated Volumes and Contaminant None at the time of this update

Date: 6/9/2021 **Status:** Inspection - More Follow-up Required **No Further Action:** ☐

Author: Lund, Dylan

Notes:

Arrived on location 1315 at 6-9-2021.

Backhoe and wheel loader onsite with no crew working. Excavations SW of pad about 300 yards long and about 15 feet wide. Some pipeline showing from the ground. Follow-up is required. Photos were taken and can be found in incident folder.

Updated Volumes and Contaminant None at the time of this update

Date: 6/9/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email from responsible party.

"... 6-9-21 Hauled 2 loads of soil to R360 Prairie – disposal very muddy due to last night's rain
Trucks had to be pulled into disposal and pushed back out.
Will check with them tomorrow and haul if possible – if not will wait until Friday ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 6/9/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email sent to responsible party.

"... Ok. Before any soil goes back into the excavation I will need lab results. ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 6/10/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email from responsible party.

"... 6-10-21 No activity on clean up – waiting for disposal to dry up.
No new soil will be hauled in until we have the soil sample test results. ..."

Full email in the incident folder.

Updated Volumes and Contaminant None at the time of this update

Date: 6/14/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email sent to responsible party.

"... I will be up on Tuesday to check on the status of the Overlee location. If you have any samples that I can take a look at that would be great. ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 6/14/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email from responsible party.

"... Barr Engineering took the soil samples on 6-8-21 and sent them to Pace analytical on 6-9-21. Barr Engineering received confirmation the samples were received by Pace Analytical on 6-11-21. If you let me know when you will be on site tomorrow I will meet you on site. Due to heavy rain on Thursday night and Friday morning there was no remedial work done until today 6-14-21. Hauling out soil to R360 Prairie Disposal. ..."

Full email in the incident folder.

Updated Volumes and Contaminant None at the time of this update

Date: 6/15/2021 **Status:** Inspection - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Arrived on location 2:25 PM 6/15/2021:

Some surficial scraping of location has been done. A significant amount of contaminated soil is still present. Excavation only 6-12" deep throughout impact area. Visible salt crystals throughout impact area. Met company, they are waiting on sample results. Company is going to halt hauling soil off until it gets sample results back.

More follow-up is necessary.

Note: Camera had wrong year set when photos were taken. The photos were taken in 2021.

Updated Volumes and Contaminant None at the time of this update

Date: 6/17/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email sent to responsible party.

"...Thanks for meeting me out at the site on Tuesday. Please email me whenever you get the test results. I am in the field the field this week so I won't be able to access my email again till Friday. I would also like an map of where the sample locations where taken and at what depth. I also expect Phoenix Petroleum to resume hauling out contaminated soil when the samples come back. ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 6/17/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email from responsible party.

"... Your verbal approval on site 6-15-21 to delay removal of any additional soil until we receive the soil samples back we have suspended clean-up until that time.

6-9-21 2 loads of soil were hauled to R360 disposal

6-14-21 8 loads of soi were hauled to R360 disposal

6-15-21 10 loads of soil ere hauled to R360 disposal

We will provide soil sample tests as soon as possible.

Barr Engineering will have the test samples mapped out where and what depths in their report ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 6/18/2021 **Status:** Inspection - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Arrived on location 11:39 6/18/2021.

Excavation opened up and strong produced water smell present. No sign of more soil having been hauled off. Still a significant amount of work needs to be done.

More follow-up is necessary.

Note: Camera had wrong year set when photos were taken. The photos were taken in 2021.

Updated Volumes and Contaminant None at the time of this update

Date: 6/21/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email sent to responsible party.

"... What is the status of the samples? .."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 6/22/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email from responsible party.

"... No results yet. ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 6/23/2021 **Status:** Inspection - More Follow-up Required **No Further Action:** ☐

Author: Schiermeister, Robin

Notes:

Arrived on site at 16:24 on 6-23-2021. It was partly cloudy with temperatures in the 80s. The area that was contaminated appears to be in some wetlands. There were two trenches that were dug with what looked to be stockpiled contamination in-between them. There was standing water in the trenches from the wetlands which had a sheen on them. There also appears to be petroleum staining in the stockpiled soil and in the trenches. At the time of the inspection no work was being done nor was there any equipment on site. Further follow-up is needed due to the contamination in the wetlands.

Updated Volumes and Contaminant None at the time of this update

Date: 6/25/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email sent to responsible party.

"... Update on site cleanup? ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 6/28/2021 **Status:** Inspection - More Follow-up Required **No Further Action:** ☐

Author: Wax, Pete

Notes:

On Site 5:17PM 6/28/2021. Collected photographs. Appears in similar condition as described on 6/18/2021 by Scott Stockdill. Obvious a lot of rain has fallen. Ditch is wet. Needs watching. Off site 5:40 PM.

Updated Volumes and Contaminant None at the time of this update

Date: 6/29/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email from responsible party.

"...Still no test results per Amanda at Barr Engineering – may not be until the end of this week Contractor from Simonson & Oien will be gone June 28th through July 4th. Will resume clean-up hopefully the week of the 5th m depending on the soil sample test results..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 6/30/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email from consultant.

"... As requested during our June 22 phone call, we are providing a status update of the Overlee 2 site. The laboratory analyses have a 15-day turnaround time, so we are expecting laboratory results around July 2. Once our team checks the data for completeness, we will provide you with the laboratory report. ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 7/1/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email sent to responsible party.

"... Reviewing your report.

A few things.

1.)What are you going to do to prove to the NDDEQ that the hydrocarbons detected in your PID readings are not associated with this release? What Analytical evidence are you going to provide?
2.)Clearance samples will have to meet 250 mg/L Cl- and below 12 for an SAR? EC is used as a guidance for field sampling I would suggest a number closer to 3,000 us/CM rather than 35,000 us/CM.

If you have any questions feel free to ask. I am looking forward to seeing your sample results. ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 7/6/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email sent to responsible party.

"... Anything back on those results yet? Also I want to clarify did the incident occur on 12/21/2020 like the report states? ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 7/7/2021 **Status:** Inspection - No Action Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Arrived on location 2:00 7/7/2021.

Samples taken in drainage of water and soils. Samples are being analyzed for group 190. No photos taken at location.

Sample numbers 21-C310 to 21-C319.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 7/7/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email from consultant for responsible party.

"... The June 8, 2021 soil sample results have been reviewed for completeness and are attached. A summary table is located on the attached figure with the specific laboratory parameters we have discussed so far (lab EC, chloride, SAR, and TPH). It appears that the cleanup has not been sufficient in meeting the criteria laid out in your July 1, 2021 email. The TPH-DRO results are wildly different from field observations (no odor/sheen/discoloration and PID readings <1ppm), leading us to believe that natural organics like lignite or peat have influenced the laboratory results. The silica gel cleanup method will be considered for subsequent TPH-DRO samples.

We are working with Phoenix to assess the site. We would like to develop a work plan with Phoenix for DEQ approval to collect more data to delineate the site and then evaluate remedial alternatives.

Thank you for asking for clarification on the incident date on the memo, which was a typo. The incident date on the spill report is correct (December 31, 2020).

As for the hydrocarbons detected on the upslope area, we would compile several lines of evidence to support the hypothesis that Phoenix is not associated with the petroleum release. Some examples are:

- a. Hydrocarbon fingerprinting to estimate relative age of release
- b. Evidence of other materials (e.g. fly ash stabilization or drilling mud)
- c. Ownership records for pads and pipes
- d. Past NDIC or NDDEQ spill records
- e. GIS data, sundry notices, other records in regard to reserve pits or flow lines
- f. Historical aerial photos
- g. Depth and spatial relationships which might point to a pit or pipes release versus an overland release

We will be in touch, but in the meantime, please let me know if you have any questions. "

Full email and attachments in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 7/8/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email from responsible party.

"... I am working in the field the remainder of the week. I will try to respond as soon as I can. ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 7/12/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email sent to responsible party.

"... Please provide me a work plan with a full delineation of the site. I would suggest a EM Survey with associated borings to fully delineate the site vertically and horizontally. Also provide an in-depth document to support your hypothesis that the hydrocarbons are from historical releases rather than from this release. I will need DRO/TPH chromatogram. In the meantime you can resume hauling out the contaminated soil for disposal.

If you have any questions feel free to ask. I will be heading to the site today for an inspection and some sampling. ...

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 7/16/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email sent to responsible party.

"... I need an update by the end of today on the status of Overlee 2. You should have resumed hauling out the contaminated soil that has been stockpiled in the drainage.

If you have any questions feel free to ask. ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 7/16/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email from consultant for responsible party

"... The dirt work contractor that Phoenix has on this project has been tied up on other projects. The removal of stockpiled soil will resume this Monday (7/19). In the meantime, we have been gathering estimates to perform site delineation from geophysical crews and geoprobe crews and are working with Phoenix to support that effort. ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 7/16/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email sent to responsible party 7/16/2021.

"... Ok, I will be in the field next week and see how the site is progressing. ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 7/21/2021 **Status:** Inspection - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Arrived on location 5:41 7/21/2021.

Heavy equipment on location with some impacted soil removed since last inspection. Background water sample was taken by road near well to the west.

More follow-up is necessary to ensure proper cleanup.

Note that imprinted photo date year is incorrect. Photos were taken in 2021.

Updated Volumes and Contaminant None at the time of this update

Date: 7/27/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email sent to responsible party.

"...Any update on the work plan for this site and the removal of stockpiled soil? ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 7/28/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email from consultant for responsible party.

"... A total of 68 loads of stockpiled soil have been hauled out since the week of July 19th, which was the remainder of stockpiled soil present. The work plan is still in progress and will be provided to you for your input of course. ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 8/5/2021 **Status:** Inspection - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Arrived on location 2:00 8/5/2021.

Stockpiled soil has been hauled away. Main area still shows signs of produced water impacts.

Still waiting on work plan from responsible party.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 8/9/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email sent to consultant for responsible party.

"... What is the current status of the Overlee 2 location? I saw last week that the excavations you had open in the flow path were closed, I will need a reasoning for that and I would like to see any contamination that were uncovered during those excavations addressed in your work plan. ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 8/9/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email from consultant for responsible party.

"... There must be some misunderstanding as the site has not been backfilled or anything like that. There has been some offsite soil stockpiled off to the side that will eventually be used for backfill once Phoenix has explicit permission to do so. ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 8/10/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email from consultant for responsible party.

"... Photo 7715 shows the site several weeks ago where there was a shallow excavation filled with water and photo 8000 shows the same area with the excavations filled. I am looking for a reason as to why this is the case. One of those open excavations had a broken pipeline in it 7379, What is the status of that pipeline? ..."

Full email and attachments in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 8/10/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email from consultant for responsible party.

"... Thank you for clarifying. I talked to the earth work contractor and based on my understanding of that conversation, the area in which the test trench was located was further excavated laterally and graded so that any incoming surface water did not sit in the trench and create a soft spot. Any incoming stormwater run-on has a larger surface area to disperse within the excavation and evaporate. All stockpiled soils from the excavation were hauled offsite to the disposal, including from the former test trench area. No backfilling has been conducted.

When Barr was onsite last, the test trench location was collected with a GPS. The test trench area will be addressed in the work plan.

The fiberglass pipe encountered within the trench was damaged and did not contain any liquids.

I hope this clears everything up, but if not please let me know. ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 8/26/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email sent to consultant for Responsible party.

"... UPDATE? ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 8/26/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email from consultant for responsible party.

"... Apologies for the delay – I am limited in my ability to work this week due to a back injury and everything got delayed. Expect a work plan coming your way next week for implementation of investigation activities. ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 9/2/2021 **Status:** Inspection - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Arrived on location 5:52 9/2/2021.

No change at location since last inspection. There appears to have been fresh soil brought in and stockpiled on contaminated soil.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 9/7/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email from consultant for responsible party.

"... My back injury has caused delay on the drafting of the Work Plan these last few weeks. The Work Plan is now in the review stage and will be provided to you by Friday, September 10.

In the meantime, I have a question regarding the source of the petroleum impacts on the upslope section of the swale. Aerial imagery from 1961 and 1966 (attached) identifies the petroleum-impacted area as the Norman Overlee 1 well pit. If the geophysical survey confirms the presence of anomalies in the areas identified as the well pit from aerial imagery, will further investigation (i.e. soil sampling and/or removal) be necessary regarding the petroleum impacts on the upslope section of the swale? If not, we assume that four feet of cover must be installed under Chapter 43-02-03-19.4. Please advise. ..."

Full email and attachments in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 9/7/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email sent to responsible party.

"... The Burden of proof is on you to convince me that the hydrocarbon contamination is not from this release, a single aerial photo is not sufficient. Provide to me a map that has your hydrocarbon delineation overlain with photos of the Norman Overlee well pit. If it is indeed a well pit which has been damaged from recent work associated with the current release, you could be liable to remediate the entire site including the removal of the well pit. If the well pit has been unharmed, I will ask that you properly contain the historical contamination. This would include laying down a Geotech fabric, with no less than one foot of sand to ensure there is no capillary action of contaminants upward and to ensure there is no spread of the contamination.

That being said.

I have attached several photos a before and after of soil that has been stockpiled in a location where proper cleanup has not occurred. This soil may need to be disposed of if it has become contaminated by the underlying contaminated soil. Please inform me what the intent is for this stockpiled soil.

Please give me 2 days' notice before any additional earth work is going to be completed at the location so I can have the opportunity to be onsite.

I look forward to seeing the work plan by the 10th. ..."

Full email and attachments in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 9/8/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email from responsible party.

"... Attached is the Work Plan for the investigation at Phoenix's Overlee 2 site for the DEQ's review and approval.

Please let us know if you have any comments or questions ..."

Full email and attachments in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 9/9/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email sent to consultant for responsible party.

"... None of the imagery on the figures loaded for me. Could you resend me those? Figures 1-4. ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 9/9/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email from responsible party.

"...Sorry about that – must have been a combination of the file size and internet connection. Attached are the missing figures. ..."

Full email and attachments in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 9/10/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email sent to responsible party.

"... I have the following changes and notes of your work plan.

Changes and notes to work plan

- The NDDEQ will need see the location of your proposed background soil borings and adjust the location if necessary.
- After the geophysical survey is complete, we can discuss how many borings and samples will need to take place.
- After the soil borings and ground water assessment is complete, we can discuss the need for permanent groundwater wells and a monitoring plan.
- A note for this incident like you addressed in section 2.6 on page four "The desktop review does not provide sufficient information to separate the December 2020 saltwater release from previous releases that may have migrated offsite down the swale to the unnamed pond or migrated vertically groundwater". The historical imagery isn't a reliable resource for delineation. Since this most recent release was left un-delineated and un-addressed for over six months, Barr will have to rely on sampling and data collected to determine a full delineation of the location.
- The NDDEQ will be holding firm on 250 mg/Kg for a cleanup value on Chlorides and less than 12 on a cleanup value for SAR (Sodium Absorption Ratio) throughout the entire impacted area.
- The use of soil amendments will only be considered if there is a way to hydrate the area and a way to collect those salts that have been leached.

Please keep us in the loop on how the delineation is going on the cuttings pit. ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 9/10/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email from responsible party.

"... Thank you for the comments Scott. We'll incorporate them and circle back after the geophysical survey. ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 9/29/2021 **Status:** Inspection - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Arrived on location 4:17 9/29/2021.

No work has been done at the location since the last inspection.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 10/4/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email sent to consultant for the responsible party.

"... Status update on the Overlee 2? ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 10/4/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email from consultant for responsible party.

"... The EM Survey was conducted on September 19. The next steps for the geoprobe investigation are still in the works given our staff's packed fall field schedules. We will submit our plan to DEQ for approval.

Phoenix received a NOV in the mail today asking for a response by this Friday, Oct 8. It was dated September 9 but postmarked September 28. Is it possible to get a 1-week extension on their response since there was some sort of delay in mailing it? Please let me know if that request should be directed towards someone else. ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 10/5/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Email sent to consultant for responsible party.

"... You will have twenty days after receiving the NOV.

If you have any other questions feel free to ask. ..."

Full email in the incident folder.

More follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 10/19/2021 **Status:** Inspection - More Follow-up Required **No Further Action:** ☐

Author: Martin, Russell

Notes:

10/11/2021 at 14:05, on location. Walked site, and photographed cleanup efforts. More follow-up needed.

Updated Volumes and Contaminant None at the time of this update

Date: 10/26/2021 **Status:** Inspection - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Arrived on location 4:35 10/26/2021.

No sign of any work having been done since last inspection.

More follow-up is necessary to ensure proper cleanup.

Updated Volumes and Contaminant None at the time of this update

Date: 11/12/2021 **Status:** Inspection - More Follow-up Required **No Further Action:** ☐

Author: Stockdill, Scott

Notes:

Arrived on location 11/12/2021.

On location to observe boring of several locations at the Overlee 2 release location. Area is still mostly un-remediated. Some of the boring locations ran into hydrocarbon contamination. Samples collected.

More follow-up is necessary to ensure proper cleanup.

Updated Volumes and Contaminant None at the time of this update